

ABSTRACT

A position sensor includes a stationary frame supporting a rotatable spool onto
25 which a cable is wound in a plurality of individual windings. A distal end of the cable
extends through a lead guide for attachment to an object whose position is desired to be
sensed. As the object moves, the cable is wound or unwound about the spool and the
spool rotates in direct correlation to the movement of the object. The spool is retained in
the frame through a threaded engagement between a threaded extension extending from
30 the spool and a threaded opening in the frame. Thus, as the spool rotates, the spool
travels along a linear path and a sensor determines the location of the threaded extension
to determine the location of the object. A recoil spring is used which may be located
within the spool itself.